

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant

: Leslie J. Squires et al.

Serial No. Filing Date

: 09/762,617 : March 30, 2001

Title

: IMPROVEMENTS RELATING TO THERMAL LAMINATION

Docket

: HUN 0004 PA

Examiner

: S. Yao

Art Unit

: 1733

MAIL STOP AF

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, NA 22313-1450, on

August 31, 2004.

Attorney

Reg. No. 29,001

DECLARATION PURSUANT TO 37 CFR §1.132

We, Leslie J. Squires and Timothy Woodbridge, declare and state as follows that:

- 1. We are the named co-inventors of the above-identified patent application. We are, respectively, the Technical Director and Chief Executive Officer of Hunt Technology, Ltd., the assignee of this patent application.
- 2. We are familiar with the patent application, Leak et al, U.S. Patent No. 5,763,041, and the latest Office Action mailed May 11, 2004, in this patent application.
- 3. We have previously submitted a sample of the laminated material that is produced by practising an embodiment of the claimed invention and compared that sample to a material that had been laminated in accordance with. Specifically, in the amendment filed on or about March 24, 2004, our representative explained that in forming a laminated material that includes a polymer film and a relatively heavy basis weight non-woven spun bonded fabric, i.e., one having a minimum weight of $50g/m^2$, unlaminated patches in the form of blisters will form in a lamination process using a point lamination pattern. This problem is explained in detail at pages 3-4 of our patent specification.

- 4. It was also explained that practising embodiments of the present invention solves the blistering problem by bringing the two materials together and laminating them by controlling the amount of point mis-registration between the emboss pattern of the non-woven, spun bonded fabric and the lamination pattern on the calender roll.
- 5. With this declaration, we are submitting additional samples to the Examiner to demonstrate the differences between the claimed process and the process and materials used by Leak et al. The sample bearing the code 45895 comprises a laminate of a lightweight woven polymer fabric having a basis weight of 45g/m² with a microembossed polyethylene film having a basis weight of 23g/m². Such a laminate is discussed in the Description of Related Art section of Leak at column 1 for use as a disposable absorbent diaper product for which hook-and-loop fasteners are employed. Leak describes the disadvantages of such a product which Leak seeks to overcome. Leak uses a non-woven lightweight fabric and thermally point bonds it to a polymer film in a way that creates a three-dimensional gathered or pillow structure as depicted in Leak's Fig. 1.
- 6. The samples bearing the code 45701 and 45755 are believed to be representative of laminates made in accordance with the teachings of Leak. That is, the laminates comprise non-woven, spun bonded polymer fabric having a basis weight of $17g/m^2$ and polymer films having basis weights of 10 and 21 g/m². respectively. The $17g/m^2$ basis weight is only somewhat less than the $24g/m^2$ weight material reported in Leak's working example. The two materials are thermally laminated together. Viewing the reverse side of the laminates, the emboss pattern from a lamination roll can be seen. However, such an emboss pattern is not a visible interference pattern. Leak's use of lighter weight materials is due to the stated preference for using such laminates as disposable diapers.
- 7. As can be seen, neither of the two laminates, codes 45701 and 45755, exhibits blistering or a visible interference pattern as was the case in the sample previously provided to the Examiner. Blistering in laminates having visible interference patterns present a problem in a laminating process only when heavier weight materials are attempted to be laminated. Leak did not face the problem of attempting to laminate thicker materials having greater basis weights. Rather, Leak addressed a different

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problem as set forth in Leak's specification, namely that of providing a less expensive alternative to the use of woven fabrics in the manufacture of disposable diapers.

8. Further, we hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application and any patent issued thereon.

Leslie J. Squires

Timothy Woodbridge

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